# VERMONT ENVIRONMENTAL BOARD 10 V.S.A. Chapter 15

RE: City of Burlington and Burlington International Airport by William F. Ellis, Esq. 271 South Union St. Burlington,, VT 05401

Findings of Fact, Conclusions of Law, and Order Land Use Permit Amendment #4C0331-4-EB

This decision pertains to an appeal of a permit amendment granted for construction at the Burlington International Airport in South Burlington, Vermont. As is explained below, the Environmental Board concludes that the project meets 10 V.S.A. § 6086(a)1(B) (waste disposal) and 9(K) (public facilities) with respect to the issues raised on appeal.

#### I. SUMMARY OF PROCEEDINGS

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On June 28, 1990, the District #4 Environmental Commission issued Land Use Permit #4C0331-4, which authorizes the Applicants to construct improvements for a project known as "Airport Improvement Program #15." This project consists of the relocation of Taxiway "A" South, construction af a new Taxiway "G3," improvement of an existing stormwater discharge system, and installation of replacement and additional taxiway lights and signs. The project will be located at the Burlington International Airport on Airport Drive in South Burlington.

On July 27, 1990, South Burlington Realty Company (the Appellant) filed an appeal with respect to drainage from the proposed project. The Appellant believes the District Commission erred with respect to  $10~\rm V.S.A.~\$~6086(a)(l)(B)$  (waste disposal) and (9)(K) (impact on public facilities). The Appellant is the agent for the owner of property which adjoins the airport and is located between the airport and Williston Road (Vt. Rt. 2A).

On August 28, 1990, Chairman Stephen Reynes convened a prehearing conference in Essex Junction, Vermont. On September 11, the Board issued a prehearing conference report. An administrative hearing panel convened a hearing in Essex Junction on October 16, with the following parties participating:

The Applicants by William F. Ellis, Esq. The Appellant by William W. Schroeder, Esq.

After taking a site visit and hearing testimony, the panel recessed the hearing pending filing of proposed findings of fact and conclusions of law, review of the record, deliberation, and preparation of a proposed decision. On

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October 31, the Appellant filed proposed findings, a request for reconsideration of an evidentiary ruling, and a reply to the motion to dismiss. On November 1, the Applicants filed proposed findings.

A proposed decision was sent to the parties on March 27, 1991, and the parties were provided an opportunity to file written objections, and to present oral argument before the full Board. On April 3, the Appellant requested oral argument. On April 12, the parties submitted responses to the proposed decision. The Board convened a public hearing in Montpelier on April 18. The Board deliberated concerning this matter on April 18. On that date, following a review of the proposed decision and the evidence and arguments presented in the case, the Board declared the record complete and adjourned the hearing. This matter is now ready for decision. The Appellant's request for reconsideration of an evidentiary ruling is denied. To the extent any vroyosed findinas of fact and conclusions of law are included below, they are granted; otherwise, they are also denied.

## II. ISSUES

The issues before the Board are:

- 1. Whether, pursuant to Criterion 1(B), the project's stormwater discharge system will result in undue water pollution by causing an increase in runoff volume onto the Appellant's property or by injecting waste materials or harmful or toxic substances into groundwater or wells.
- 2. Whether, pursuant to Criterion 9(K), stormwater runoff from the project will increase runoff beyond the capacity of a culvert running under Williston Road so as to unreasonably endanger or materially jeopardize the public investment in that road or to interfere with its function, safety, or efficiency.

### III. FINDINGS OF FACT

The Burlington International Airport is located on Airport Road in South Burlington, Vermont, close to the intersection of Airport and Williston Roads. The proposed project is known as "Airport Improvement Program #15," and consists of the following: the relocation of Taxiway "A" South, the construction of a new Taxiway

- "G3," improvement of an existing stormwater discharge system necessitated by the relocation of Taxiway A South, and the installation of replacement and new taxiway lights and signs. The improvements to the stormwater discharge system are to a part of the system which discharges to Outfall #3, which is one of four outfalls discharging onto adjoining property owned by Munson Earth Moving Corporation. The Appellant is an agent for Munson. The Munson property is located between the Airport and Williston Road. The four outfalls were part of the original airport construction.
- 2. The proposed project was constructed following issuance of the land use permit which is the subject of this appeal. As part of the project, approximately 3.8 acres of pavement were added to the Airport. The existing stormwater discharge system was reconstructed to drain this new area. The reconstructed system includes grasslined swales and catch basins which collect stormwater. The water then proceeds through storm culverts and a subsurface disposal system. The subsurface system consists of 1,250 linear feet (LF) of 24-inch perforated pipe, and ,700 LF of reinforced concrete pipe which is not perforated. The perforated pipe is located in large trenches measuring 5.5 feet in depth by six feet in width. The purpose of the perforated pipe is to allow water to filter out of the pipe into the surrounding soil. The large trenches are located at a depth of approximately eight to 14 feet and have two inches of crushed stone on the bottom. A 'filter fabric is wrapped around the outside of the stone. The pipes discharge through Outfall #3.
- 3. As a result of the project, the Applicants estimate that the peak discharge from the four outfalls onto the Munson property will decrease from 44.1 cubic feet per second (CFS) prior to project construction to 34.6 CFS after construction. The Appellantestimates that the peak discharge from the pipes will increase to 59.5 CFS following construction. The reason for the differing estimates in large part turns on different assessments of the permeability of the soils surrounding the pipes which lead to Outfall #3, and the consequent ability of the soils to allow or not allow water to filter out of the pipes. The Board finds that those soils and the system design will allow enough exfiltration to ensure that

the total post-construction discharge does not exceed the total pre-construction discharge of 44.1 CFS.

- 4. The Agency of Natural Resources, Department of Environmental Conservation, issued Discharge Permit #1-0839 to the Applicants on June 11, 1990. The permit approves the reconstructed discharge system. To obtain a discharge permit, a proposed discharge must meet a number of requirements, including that the post-construction not exceed the preconstruction discharge.
- 5. A wetland located on the Appellants's property is identified as significant under the Vermont Wetland Rules because of its ability to store flood water and stormwater runoff and to protect surface and groundwater from pollution. The wetland is located downhill from Outfall #3, between that outfall and Williston Road.
- 6. A water sample from Outfall #3 taken on April 25, 1990 found no volatile organics or ethylene glycol. The sample found levels of TKN (total kjehdal nitrogen) and ammonia as nitrogen which are above the levels normally found in groundwater but below maximum permissible levels under the Vermont Indirect Discharge Rules. No other harmful or toxic substances were found. TKN and ammonia as nitrogen are associated with urea, which is used to "de-ice" paved areas at the airport.
- 7. No fueling or "de-icing" of aircraft will take place in any area that drains into the stormwater discharge system which discharges through Outfall #3.
- 8. In Land Use Permit Amendment #4C0331-4, the District #6 Environmental Commission issued Condition 9, which requires submission, review, and approval of a stormwater discharge monitoring system for the project. The District Commission also issued Condition 10, in which it reserved jurisdiction to review stormwater run-off in the event of increase beyond pre-construction discharge levels at Outfalls #3 and #4.

- 9. The property owned by Munson drains into a culvert which lies under Williston Road. The culvert is 18 inches in diameter and has a capacity of approximately 8.8 CFS.
- 10. The proposed project will not involve the injection of harmful or toxic substances into groundwater or wells.
- IV. CONCLUSIONS OF LAW

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#### A. <u>Motion to Dismiss</u>

The Applicants have moved to dismiss primarily on the grounds that the proposed project complies with the criteria at issue. The Board treats the motion as a proposed conclusion of law that the project meets those criteria.

# B. <u>Criterion 1(B) (Waste **Disposal)**</u>

10 V.S.A. § 6086(a)(1) requires that, prior to issuing a permit, the Board find that a project will not create undue water polution. 10 V.S.A. § 6086(a)(1)(B) provides:

A permit will be granted whenever it is demonstrated by the applicant that, in addition to all other applicable criteria, the development or subdivision will meet any applicable health and environmental conservation department regulations regarding the disposal of wastes, and will not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells.

The Applicants have submitted a discharge permit issued by the Agency of Natural Resources, Department of Environmental Conservation, which approves their stormwater discharge system. Pursuant to Board Rule 19(E)(1)(e), this permit creates a presumption that waste materials and wastewater can be disposed of through the discharge system without resulting in undue water pollution.

The Appellants seek to rebut this presumption. Pursuant to Board Rule 19(F), the presumption is rebutted if the Appellant persuades the Board that the discharge in question is likely to result in undue water pollution. Based on the evidence presented, including the design of the system and the permeability of the soils, the Board is persuaded that the post-construction discharge will not exceed the pre-

construction discharge and that the discharge will not pollute the receiving waters. The Board therefore concludes that stormwater runoff from the project will not create undue water pollution due to the disposal of waste or wastewater.

The Board's conclusion is also based on the conditions issued by the District Commission referenced in Finding 8, above. The Board believes these conditions will help to ensure that the discharge from the airport onto the Munson property does not cause undue water pollution.

The Board further concludes that stormwater runoff from the project will not involve the injection of waste materials or harmful or toxic substances.

## C. <u>Criterion 9(K) (Public Facilities)</u>

The Board concludes that stormwater runoff from the project will not endanger the public investment in Williston Road or impair the road's function, efficiency, or safety. The issue here is whether runoff from the outfalls onto the Munson property will be so great that an existing culvert under Williston Road will not be able to handle the runoff from that property. Since the Board has concluded that the discharge from the outfalls will not increase, there will be no impact on the culvert from that discharge.

V. ORDER

Land Use Permit Amendment #4C0331-4-EB is hereby issued. Jurisdiction over this matter is returned to the District #4 Environmental Commmission.

Dated at Montpelier, Vermont this 26th day of April, 1991.

ENVIRONMENTAL BOARD

Stephen Reynes, Acting Chair

Ferdinand Bongartz

Arthur Gibb

Charles F. Storrow Steve E. Wright

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